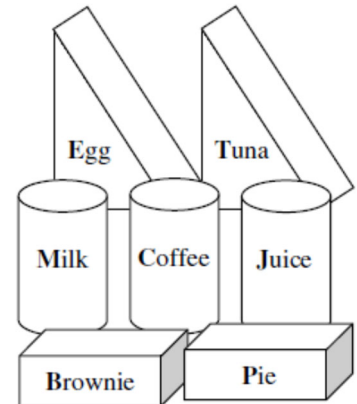Name: _____   Date: _____

Learning Goal 9.1	I can calculate probabilities.

Example You are in line at the coffee shop and the current offerings are as follows:

Sandwich	Egg ( )		Tuna ( )	
Beverage	Milk ( )	Coffee ( )	Juice ( )	
Dessert	Brownie ( )		Pie ( )	

If you must choose one option from each category, use a tree diagram to list all the possible meals.

Egg   Tuna

Milk   Coffee   Juice

Brownie   Pie

a. How many possible meals are there?

b. How can you determine the number of possible meals without listing all of them?

Suppose the coffee shop also features ice cream in 24 flavours. You can order regular, sugar, or waffle cones. Suppose you order a double cone with two scoops of ice cream.

a. How many choices are there for the cone?

b. How many choices are there for the first scoop?

c. How many choices are there for the second scoop?

d. How many different double comes are possible?

Example A marble is selected from a bag containing one orange marble, one white marble and one purple marble. A jellybean is chosen from a jar containing one red, one yellow, one green and one blue jellybean.

a. Use a table to list the sample space.

b. How many different possible outcomes are there?

c. What is the probability of getting an orange marble and a yellow jellybean?